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| 09/788,295 | 02/16/2001 | Stephan W. Gehring | FANT-P019 | 1506 |
| 44279 | 7590 | 10/06/2005 | EXAMINER | |
| PULSE-LINK, INC. 1969 KELLOGG AVENUE CARLSBAD, CA 92008 | | | SON, LINH L D | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2135 | |

DATE MAILED: 10/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/788,295

Applicant(s)

GEHRING, STEPHAN W.

Examiner

Linh LD Son

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 and 19-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17, and 19-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is responding to the RCE received on 07/05/05.
2. Claims 1-6, 9-11, 14-15, and 19-23 are amended. Claim 18 is canceled.
3. Claims 1-17, and 19-23 are pending.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. **Claims 1-10, 14, and 19-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Jakobsson, US Patent No. 6587946.**
6. As per **claims 1-2**, Jakobsson discloses "A method for forwarding messages in a multi-node network (Col 6 line 58 to Col 7 line 20 (multi-proxy servers and e-mail clients)) comprising decrypting, by any forwarding node (Proxy servers), any message received by said any forwarding node" in (Col 6 line 58 to Col 7 line 20, Col 6 lines 3-25, and Col 6 lines 40-48).

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7. As per **claims 3-4, 7-8, and 22-23**, Jakobsson discloses “the method of claims 2, 6, and 21, wherein said encrypting said message by said source node, said decrypting of said transmitted message by said any forwarding node, said re-encrypting of said decrypted message by said any forwarding node, and said decrypting of said re-encrypted message by said destination node, are carried out using asymmetrical/symmetrical encryption and decryption” in (Col 6 lines 30-48, and Col 1 lines 30-43, and Col 2 line 60 to Col 3 line 8).

8. As per **claim 5**, Jakobsson discloses “A method for forwarding messages in a multi-node network (Col 6 line 58 to Col 7 line 20 (multi-proxy servers and e-mail clients)) comprising decrypting, by any forwarding node, any message received by said any forwarding node prior to determining a destination for said received message” in (Col 6 line 58 to Col 7 line 20, Col 6 lines 3-25, and Col 6 lines 40-48).

9. As per **claim 6**, Jakobsson discloses “The method of claim 5, further comprising encrypting, by said any forwarding node, each message transmitted by said any forwarding node” in (Col 6 line 58 to Col 7 line 20, Col 6 lines 3-25, and Col 6 lines 40-48).

10. As per **claims 9, and 14**, Jakobsson discloses the “Cryptographic Communication System” invention, which includes a method for encrypting and decrypting messages in a multi-node network” in (Col 6 line 58 to Col 7 line 20),

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comprising: (a) encrypting a message by a source node and transmitting said encrypted message to any forwarding node (Col 5 lines 18-25); (b) receive the message, decrypting said encrypted message by said any forwarding node (Col 6 lines 3-30, Col 5 lines 18-65); (c) re-encrypting said decrypted message by said any forwarding node and transmitting said re-encrypted message to a destination node (Col 8 lines 9-23, and Col 8 lines 25-68); and (d) receiving and decrypting said re-encrypted message by said destination node" in (Col 8 lines 55-60, and Col 8 lines 25-65).

11. As per **claims 10**, Jakobsson discloses "The method of claim 9, wherein said encrypting said message by said source node, said decrypting of said transmitted message by said any forwarding node, said re-encrypted message by said destination node, are carried out using symmetrical encryption and decryption" in (Col 6 lines 30-48, and Col 1 lines 30-43, and Col 2 line 60 to Col 3 line 8).

12. As per **claim 19**, Jakobsson discloses "An encryption and decryption system for a multiple node network (Col 6 line 58 to Col 7 line 20 (multi-proxy servers and e-mail clients)), comprising a plurality of nodes (multi-proxy servers), with each of the plurality of nodes including means for decrypting all received messages, and means for encrypting all transmitted messages" in (Col 6 line 58 to Col 7 line 20, Col 6 lines 3-25, and Col 6 lines 40-48).

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13. As per **claims 20**, Jakobsson discloses the encryption and decryption system of claim 19, further comprising at least one source node, said source node including means for encrypting messages and transmitting said encrypted messages to said any forwarding node (Col 6 line 58 to Col 7 line 20).

14. As per **claims 21**, Jakobsson discloses the encryption and decryption system of claim 20, further comprising at least one destination node, said destination node including means for decrypting messages transmitted by said any forwarding node (Col 8 lines 55-60, and Col 8 lines 25-65).

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. **Claims 11-13, and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jakobsson and further in view of Mitty et al, US Patent No. 6199052, hereinafter "Mitty".**

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17. As per **claims 11 and 15**, Jakobsson discloses the method of claims 10 and 14.

Further Jakobsson discloses “(c) said decrypting of said transmitted message by said any forwarding node is carried out using a second key; and (d) said re-encrypting of said decrypted message by said any forwarding node is carried out using said second key” in (Col 6 lines 3-30, Col 5 lines 18-65, Col 8 lines 9-23, and Col 8 lines 25-68).

However, Jakobsson is silent on “wherein: (a) said encrypting said message by said source node is carried out using a first key; (b) said decrypting said re-encrypted message by said destination node is carried out using said first key”;

Nevertheless, Mitty discloses the “Secure Electronic Transactions Using A Trusted Intermediary with Archive and Verification Request Services” invention, which teaches a method of sending the a message securely between the sender and the receiver through an intermediary. The message M1 gets encrypted first with the sender private key to form M2. Then get encrypted a couple more times with certification and key information and further encrypted again at the 5th time using the public key of the intermediary before send the M6 encrypted message to the intermediary (forwarding node) (Col 9 line 12 to Col 10 line 65). The M6 message gets decrypted with the intermediary's private key to process the message M5 according and identify the destination. The intermediary does not have the public key of the sender to decrypt all the level of encryption. The message M5 then becomes M7 after processing (Col 11 lines 44-55). Then M7 gets encrypted with more information a couple more rounds until the last round, M10, where the M9 message gets encrypted with the recipient's public key (Col 11 lines 43 to Col 12 line 65). The message M9 then gets decrypted multiple

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times for verification of originality until it gets to the text message M2, which the receiver would use the sender's public key to decrypt to clear text (Col 13 lines 1-10). As Mitty discloses, the key to encrypt the original text message and the key to decrypt the encrypted message is only the first key.

Therefore, it would have been obvious at the time of the invention was made for one having ordinary skill in the art to incorporate the invention of Mitty with Jakobsson with the motivation of protecting the privacy of the message from the intermediary or forwarding node by not sharing the knowledge of the encrypting key of the message.

18. As per **claims 12 and 16**, Jakobsson and Mitty disclose "the method of claims 11 and 15, wherein said second encryption/decryption key is different from said first encryption/decryption key" in (Mitty, Col 8 lines 20-34, Col 10 lines 10-27, and Col 13 lines 1-10).

19. As per **claims 13 and 17**, Jakobsson and Mitty discloses "the method of claim 11, wherein said second encryption/decryption key and said first encryption/decryption key are the same" in (Mitty, Col 3 lines 43-50).

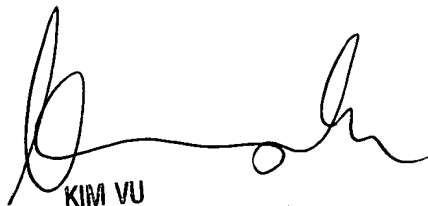
20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Linh LD Son whose telephone number is 571-272-3856. The examiner can normally be reached on 9-6 (M-F).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Linh LD Son
Examiner
Art Unit 2135



KIM VU
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